

1/14

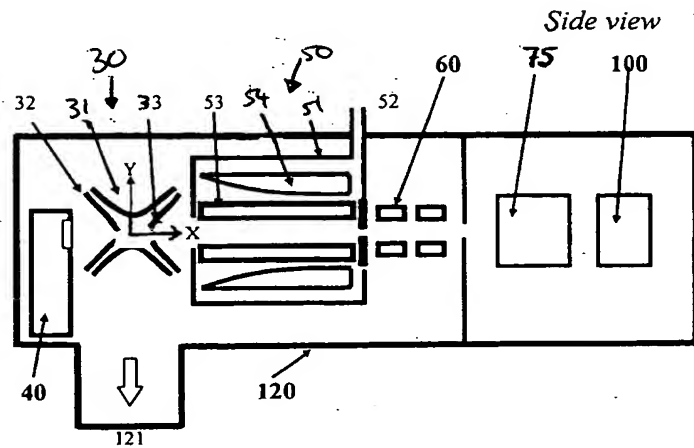
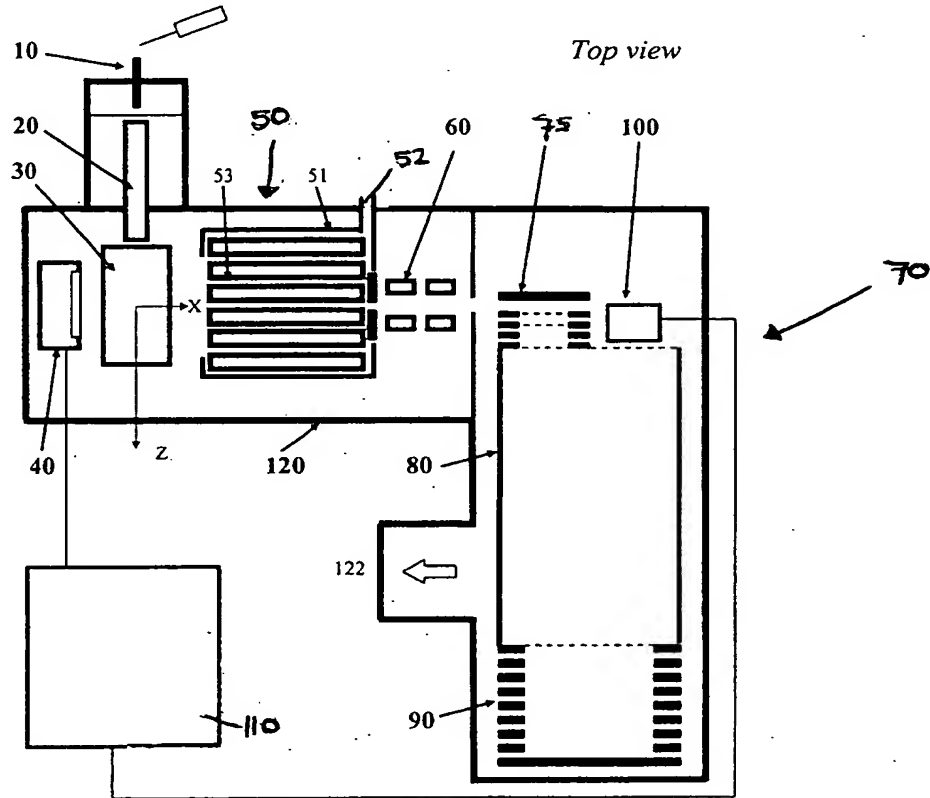


Fig. 1.

2/14

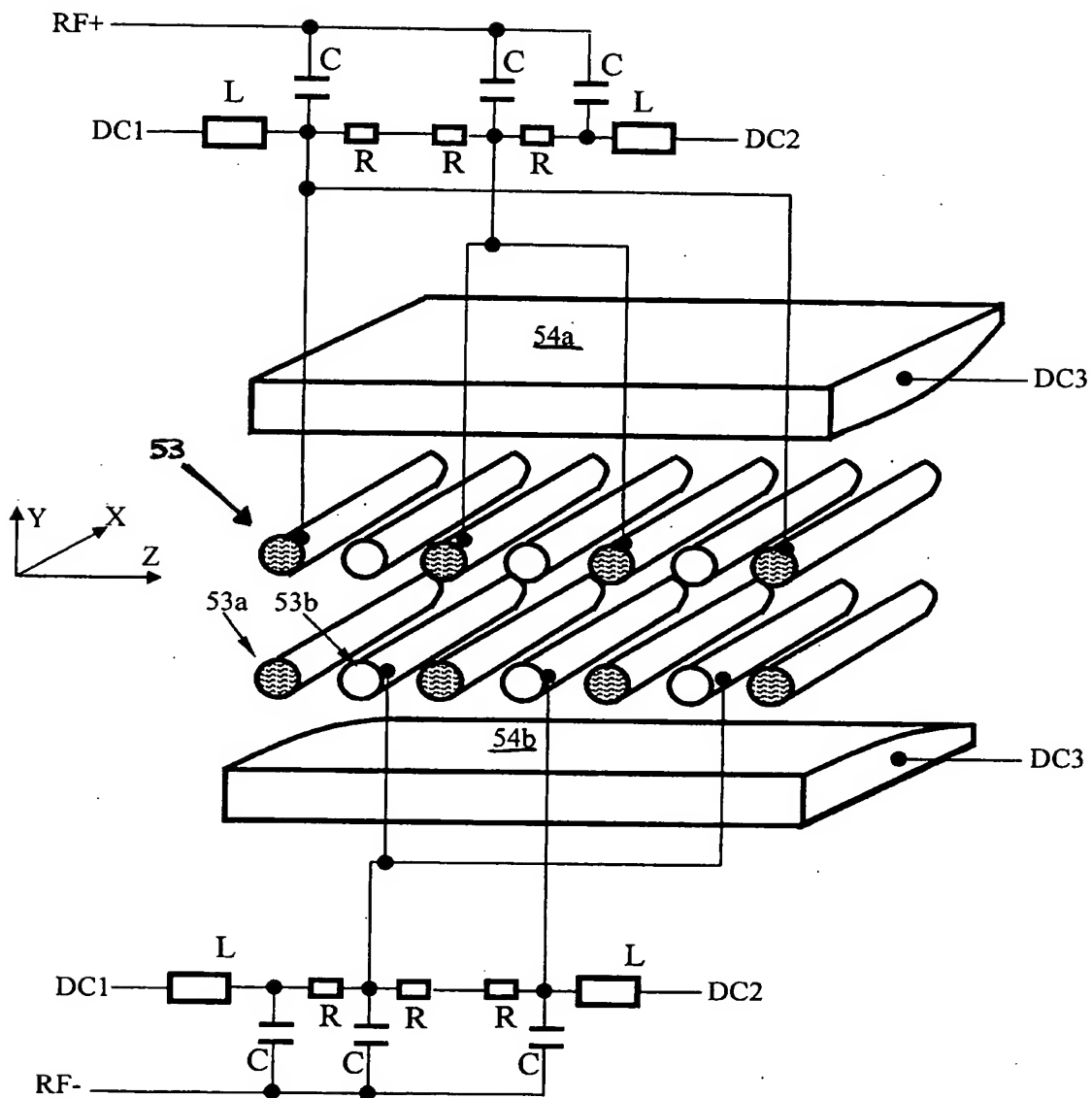


Fig. 2.

3/14

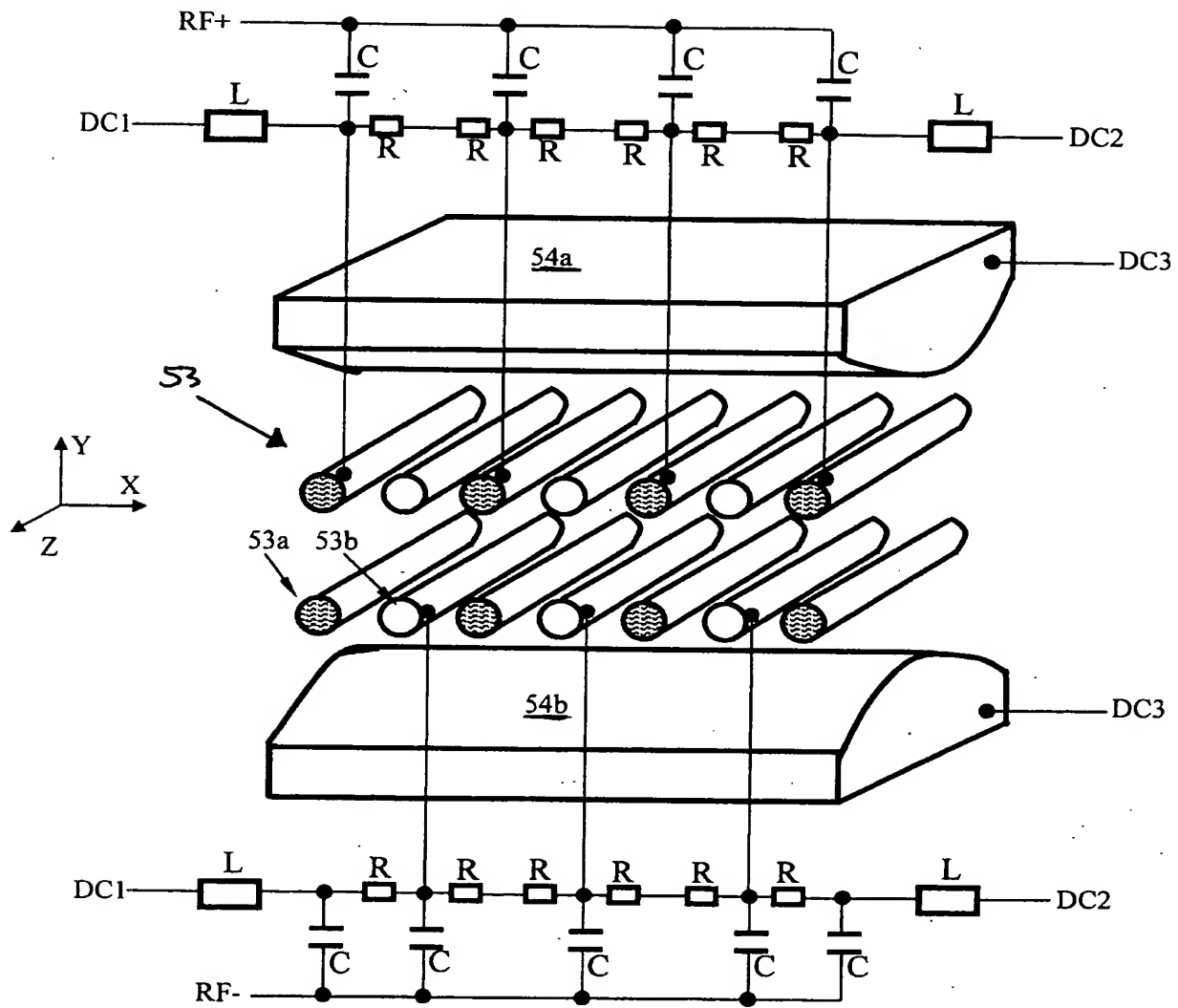


Fig. 3.

4/14

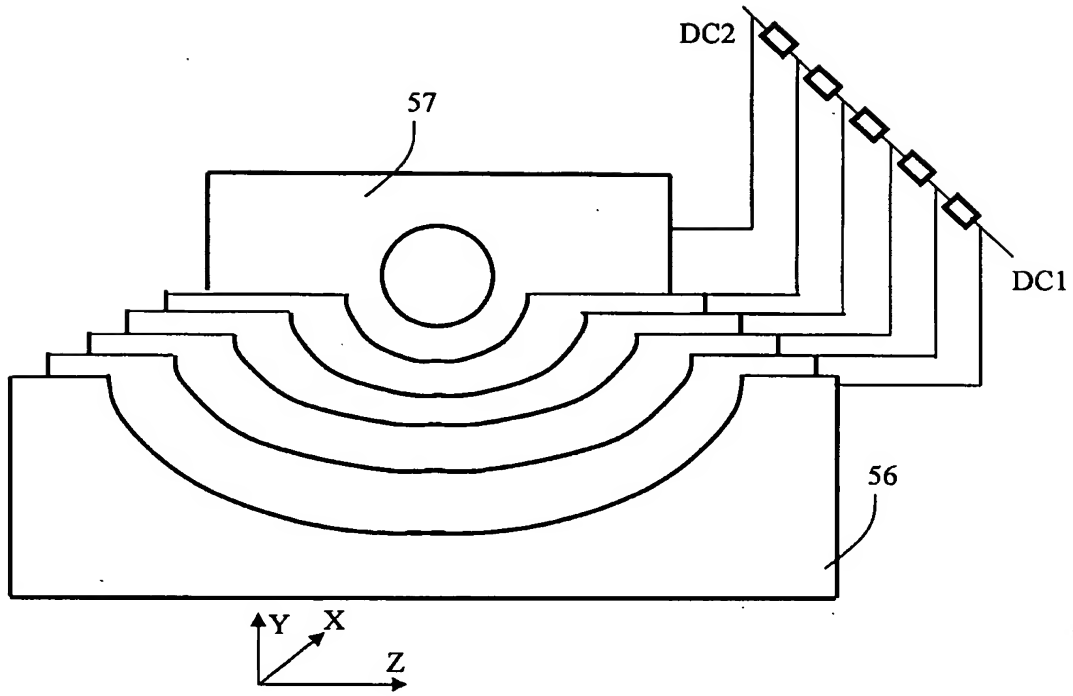


Fig. 4a.

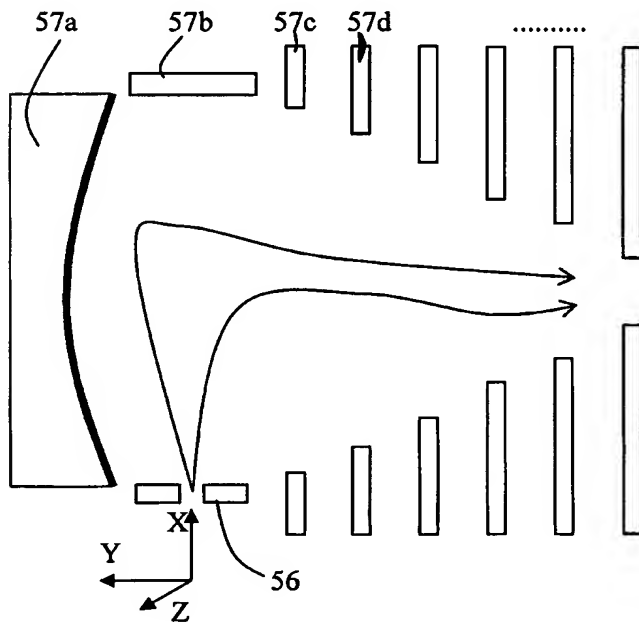


Fig. 4b.

5/14

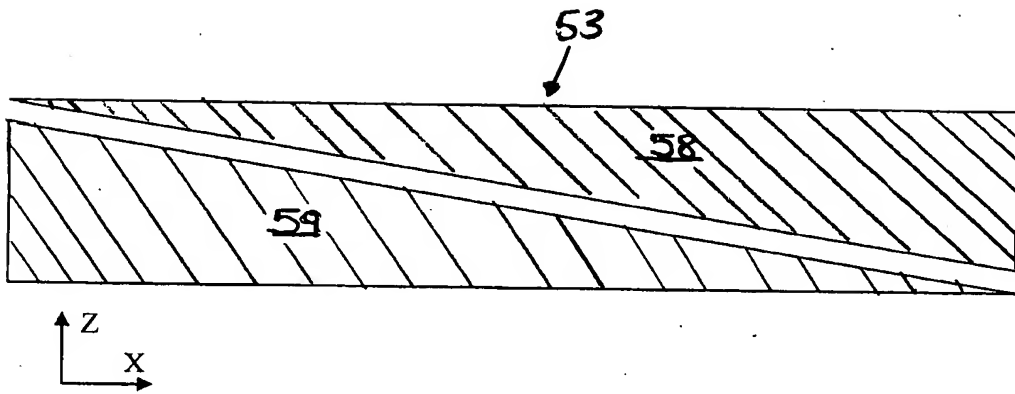


Fig. 5a

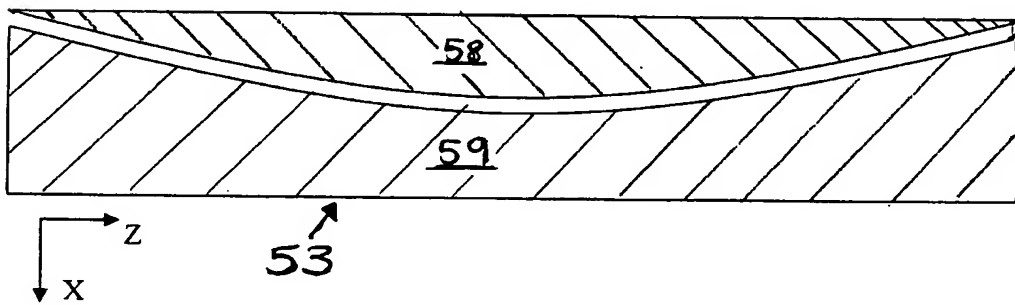


Fig. 5b

6/14

Figure 6a

Partitioning of Rod Electrodes to Allow For X Field Gradient

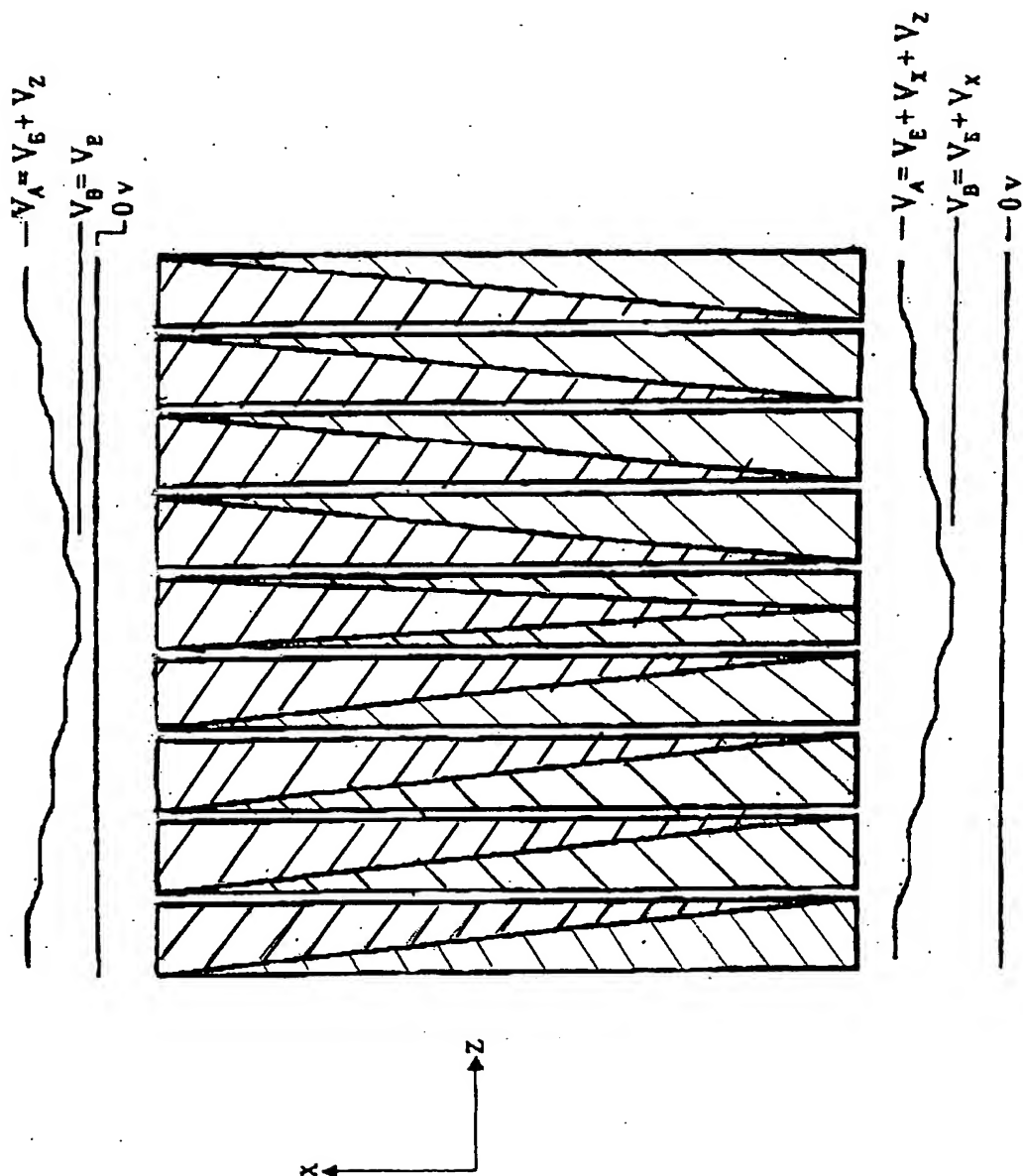
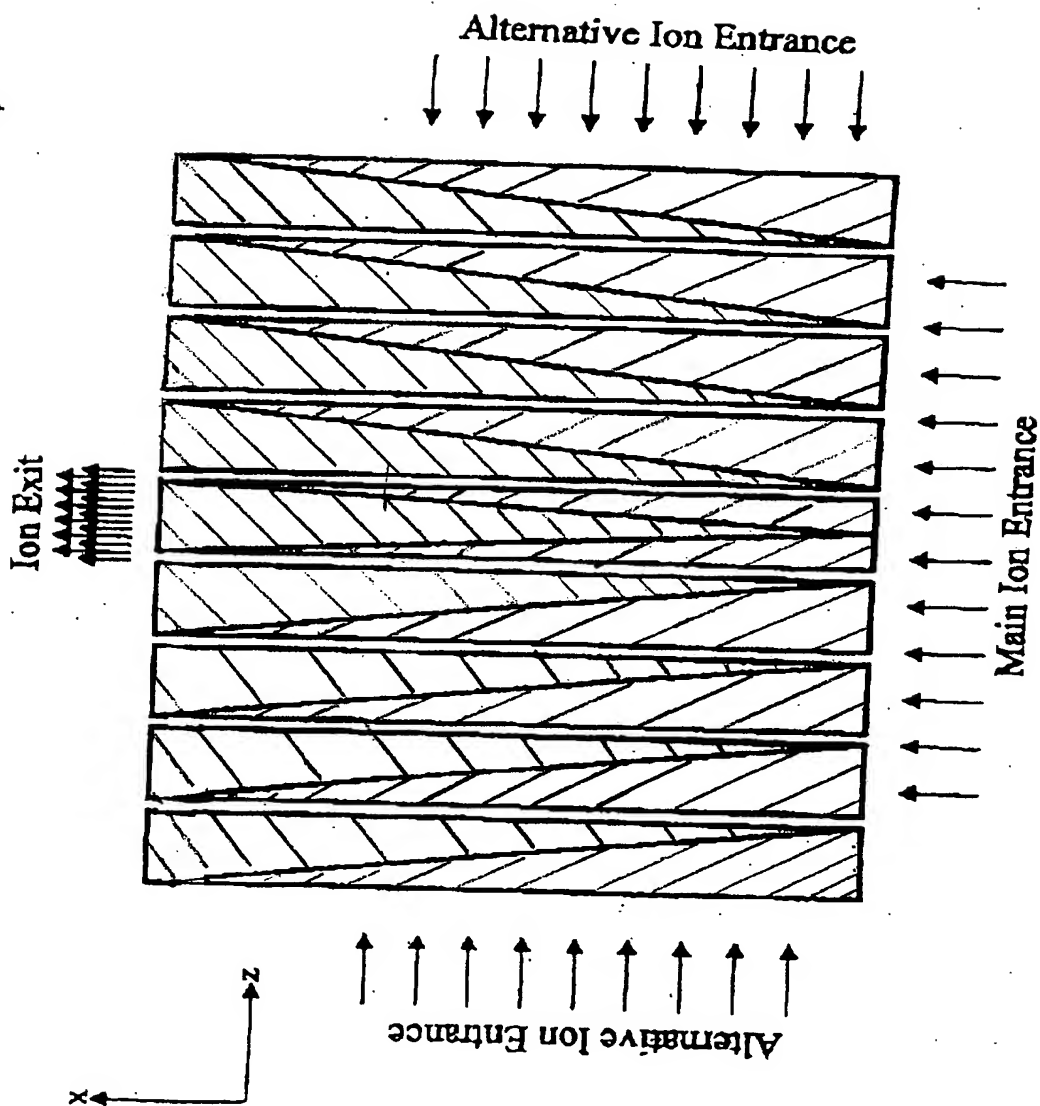


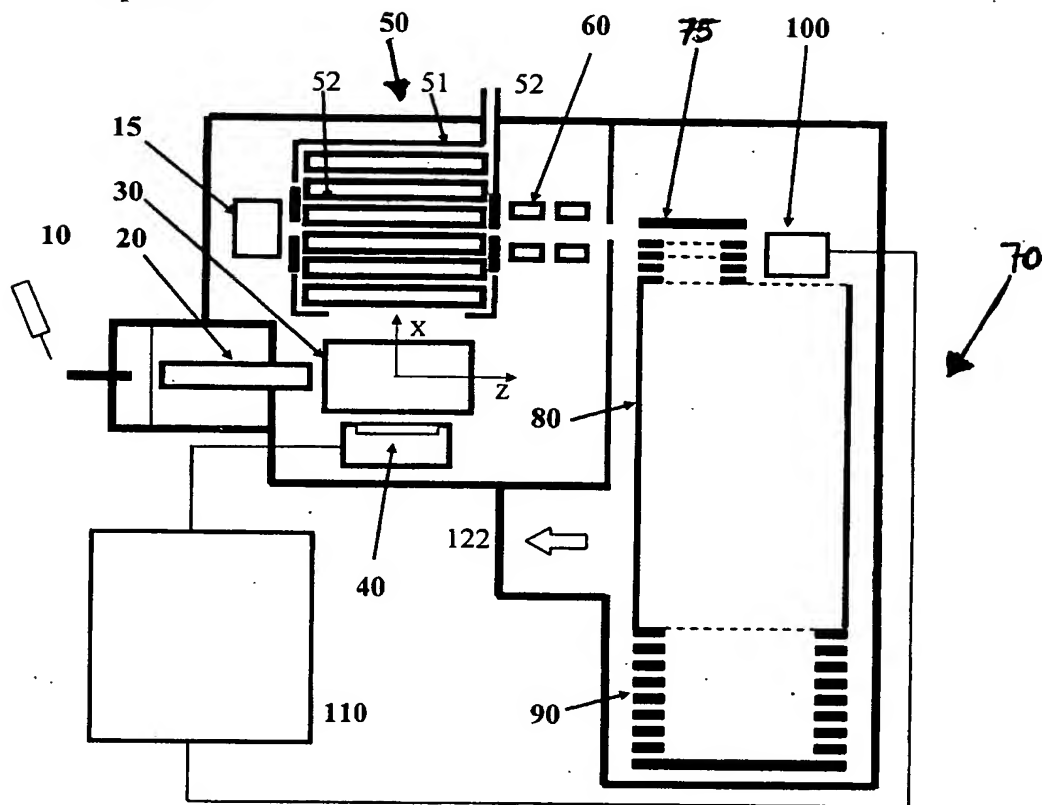
Figure 6b

Ion Entrance and Exit From Planar Ion Guide



8/14

Top view



Side view

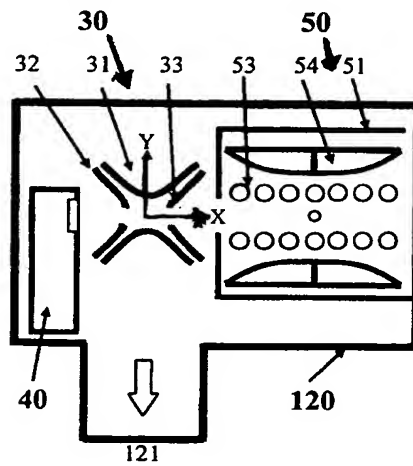


Fig. 7.

9/14

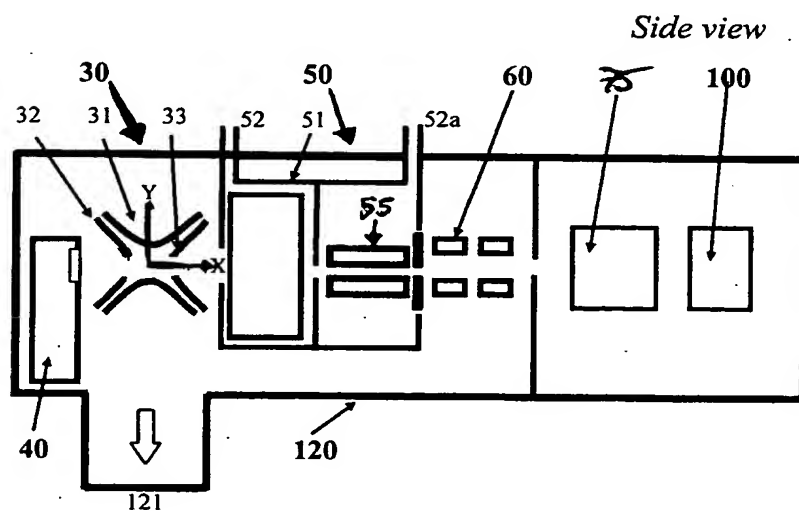
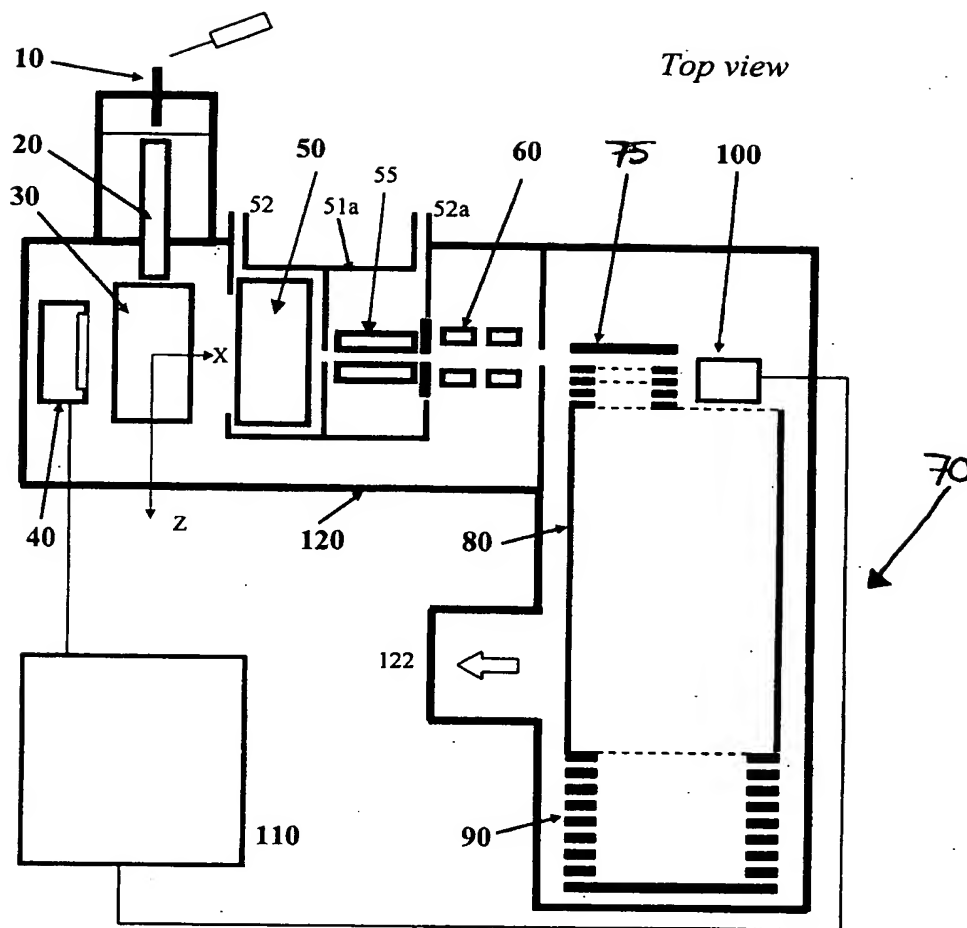


Figure 8

Figure 9

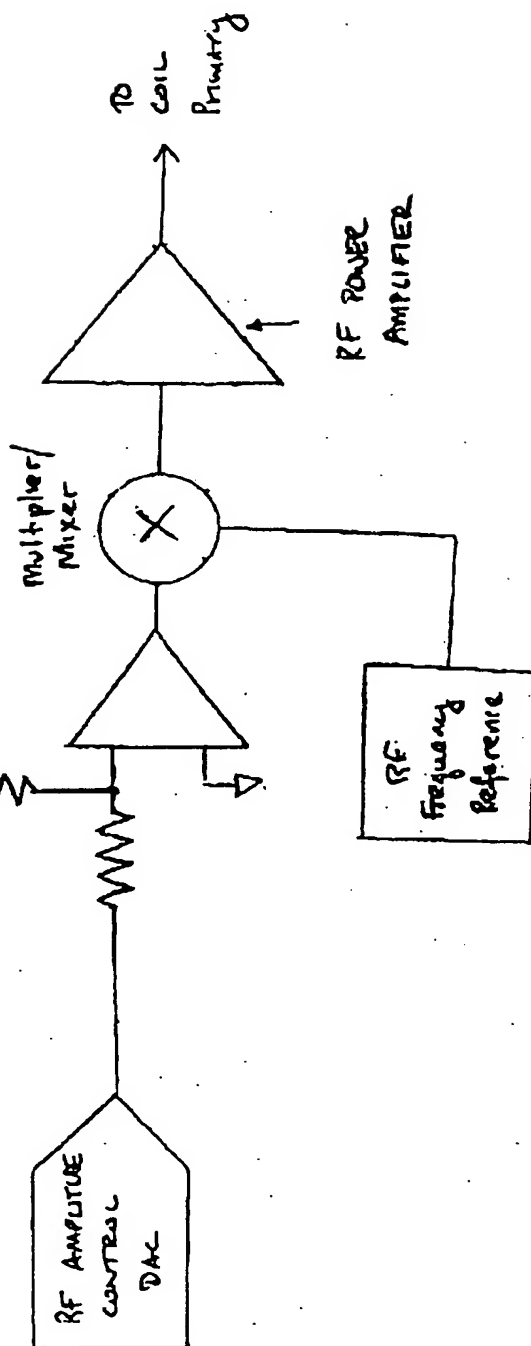
Conventional Quadrupole / Ion Trap
RF Generation / Control Circuitry

RF Amplitude

Detection Circuit

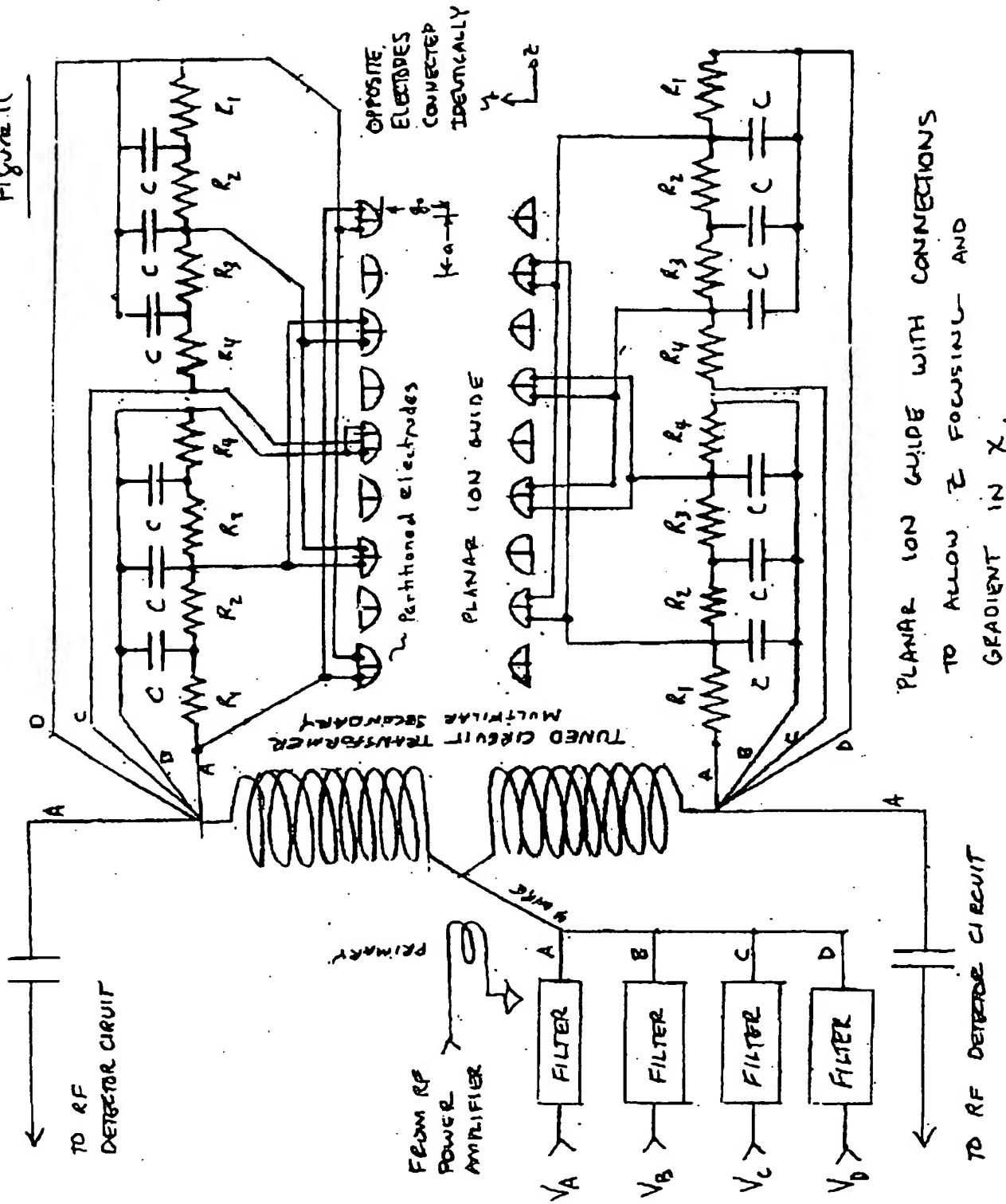
Inverted
output

From Detector
Capacitors



12/14

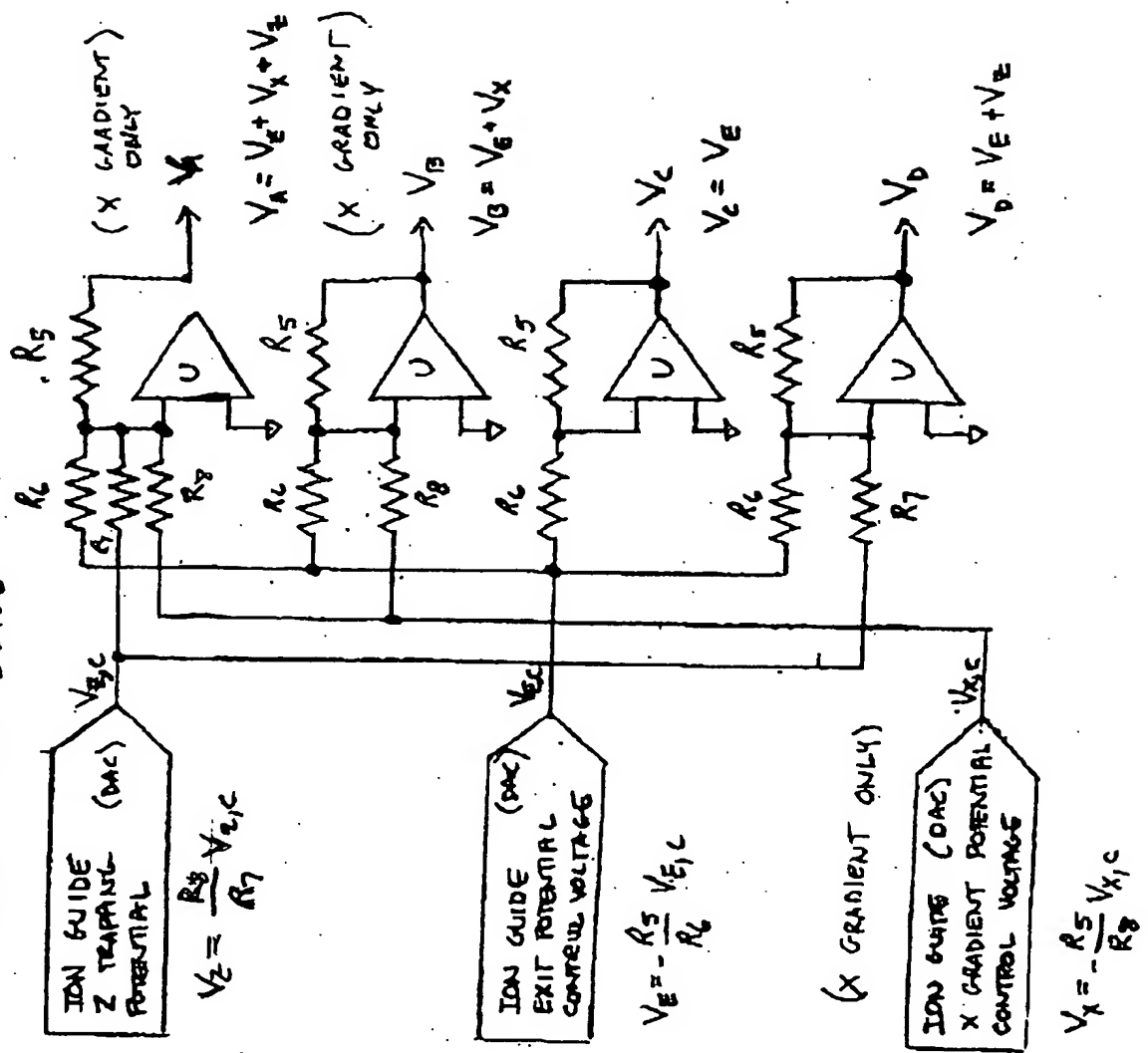
Figure 11



13/14

Figure 12

CIRCUITRY TO CREATE NEED DC VOLTAGES
FOR PLANAR ION GUIDE



Estimated Voltages

$V_E = 4 \text{ volts}$
 $V_X \sim 0.5 \text{ volts or less}$

14/14

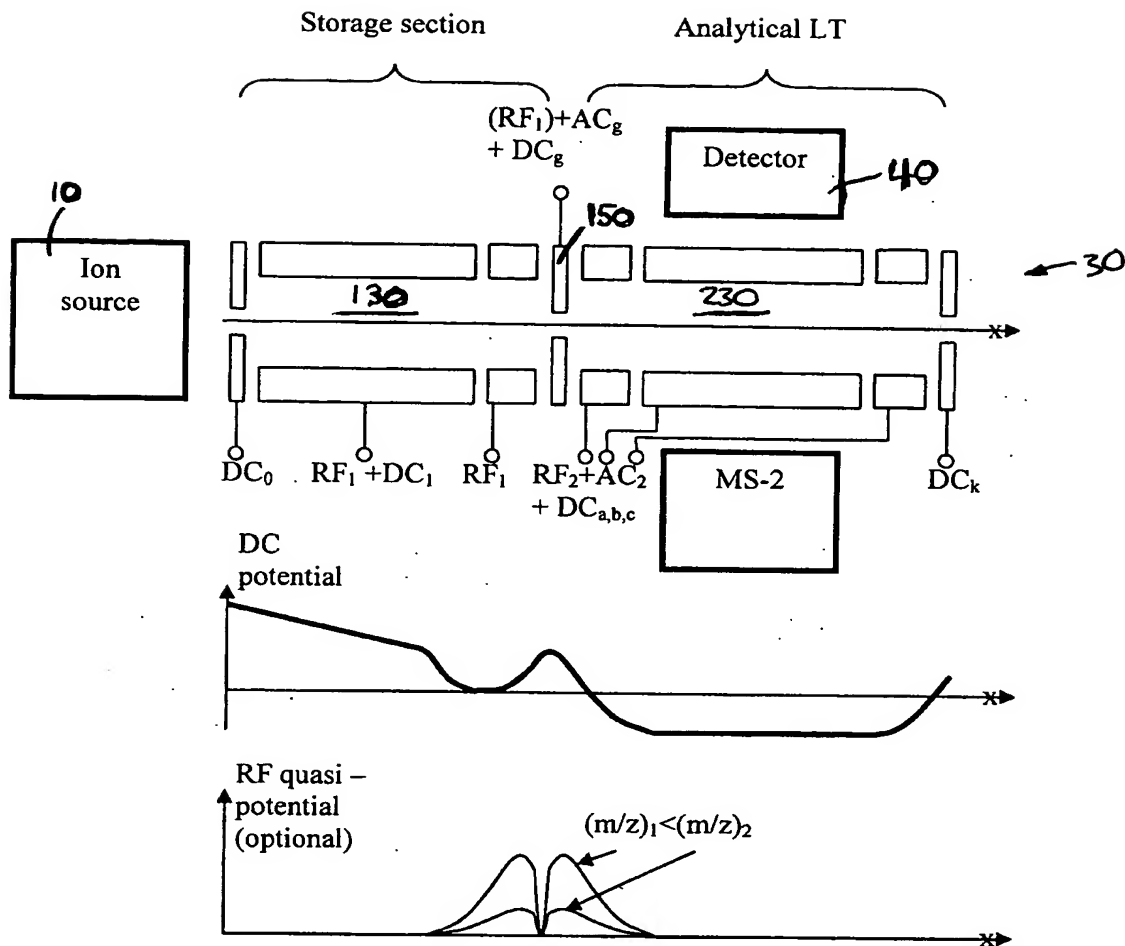


Figure 13